

Lc743	M N F N V S L M E K L K W K I K C I E N	20
RM8con	. . . . .	
1	- - - + - - - + - - - + - - - + - - - + - - - +	60
Lc743	<u>ATGAATTTCAACGTTAGTTTGATGGAGAAATTAAAAATGGAAGATTAAATGCATTGAAAAT</u>	
RM8A	.....Lc743/5'.....	
RM8B	.....	
RM8C	.....	
RM8con	.....	
Lc743	K F L N Y R L T T N E T V V A E T E Y G	40
RM8con	. . . . .	
61	- - - + - - - + - - - + - - - + - - - + - - - +	120
Lc743	AAGTTTTTAAACTATCGTTTAACTACCAATGAAACGGTGGTAGCTGAAACTGAATATGGC	
RM8A	.....	
RM8B	.....	
RM8C	.....	
RM8con	.....	
Lc743	K V K G V K R L T V Y D D S Y Y S F E G	60
RM8con	. . . . .	
121	- - - + - - - + - - - + - - - + - - - + - - - +	180
Lc743	AAAGTGAAAGGCCGTTAACGTTTAACTGTGTACGATGATTCCCTACTACAGTTTTGAGGGT	
RM8A	.....	
RM8B	.....	
RM8C	.....	
RM8con	.....	
Lc743	I P Y A Q P P V G E L R F K A P Q R P T	80
RM8con	. . . . .	
181	- - - + - - - + - - - + - - - + - - - + - - - +	240
Lc743	ATACCGTACGCCCAAACCGCCAGTGGGTGAGCTGAGATTTAAAGCACCCCAGCGACCAACA	
RM8A	.....	
RM8B	.....	
RM8C	.....	
RM8con	.....	
Lc743	P W D G V R D C C N H K D K S V Q V D F	100
RM8con	. . . . .	
241	- - - + - - - + - - - + - - - + - - - + - - - +	300
Lc743	CCCTGGGATGGTGTGCGTGATTGTTGCAATCATAAAGATAAGTCAGTGCAAGTTGATTTT	
RM8A	.....	
RM8B	.....C.....	
RM8C	.....	
RM8con	.....	

FIGURE 1

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Lc743 I T G K V C G S E D C L Y L S V Y T N N 120  
RM8con . . . . .  
301 -----+-----+-----+-----+-----+ 360  
Lc743 ATAACGGGCAAAGTGTGTGGCTCAGAGGATTGTCTATACCTAAGTGTCTATACGAATAAT  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 L N P E T K R P V L V Y I H G G G F I I 140  
RM8con . . . . .  
361 -----+-----+-----+-----+-----+ 420  
Lc743 CTAAATCCCGAAACTAAACGTCCTTTAGTATACATACATGGTGGTGGTTTATTATC  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 G E N H R D M Y G P D Y F I K K D V V L 160  
RM8con . . . . .  
421 -----+-----+-----+-----+-----+ 480  
Lc743 GGTGAAAATCATCGTGATATGTATGGTCCTGATTATTTTATTAAAGGATGTGGTGTG  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 I N I Q Y R L G A L G F L S L N S E D L 180  
RM8con . . . . .  
481 -----+-----+-----+-----+-----+ 540  
Lc743 ATTAACATACAATATCGTTTGGGAGCTCTAGGTTTCTAAGTTTAAATTGAGAAGACCTT  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 N V P G N A G L K D Q V M A L R W I K N 200  
RM8con . . . . .  
541 -----+-----+-----+-----+-----+ 600  
Lc743 AATGTGCCCCGTAATGCCGGCCTTAAAGATCAAGTCATGGCCTTGCGTTGGATTAAAAAT  
RM8A .....  
RM8B .....  
RM8C .....A.....  
RM8con .....

Figure 1 continued

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Lc743     N C A N F G G N P D N I T V F G E S A G     220  
RM8con     . . . . .  
601 -----+-----+-----+-----+-----+ 660  
Lc743     AATTGCGCCAACCTTTGGTGGCAATCCCGATAATATTACAGTCTTTGGTGAAAGTGCCGGT  
RM8A     .....  
RM8B     .....  
RM8C     .....  
RM8con     .....

Lc743     A A S T H Y M M L T E Q T R G L F H R G     240  
RM8con     . . . . .  
661 -----+-----+-----+-----+-----+ 720  
Lc743     GCTGCCTCTACCCACTACATGATGTTAACCGAACAACCTCGCGGTCTTTCCATCGTGGT  
RM8A     .....  
RM8B     .....  
RM8C     .....  
RM8con     .....

Lc743     I L M S G N A I C P W A N T Q C Q H R A     260  
RM8con     . . . . . L . . . . .  
721 -----+-----+-----+-----+-----+ 780  
Lc743     ATACTAATGTCGGGTAATGCTATTTGTCCATGGGCTAATACCCAATGTCAACATCGTGCC  
RM8A     .....T.....  
RM8B     .....T.....  
RM8C     .....T.....  
RM8con     .....T.....

Lc743     F T L A K L A G Y K G E D N D K D V L E     280  
RM8con     . . . . .  
781 -----+-----+-----+-----+-----+ 840  
Lc743     TTCACCTTAGCCAAATTGGCCGGCTATAAGGGTGAGGATAATGATAAGGATGTTTTGGAA  
RM8A     .....  
RM8B     .....  
RM8C     .....A.....  
RM8con     .....

Lc743     F L M K A K P Q D L I K L E E K V L T L     300  
RM8con     . . . . .  
841 -----+-----+-----+-----+-----+ 900  
Lc743     TTTCTTATGAAAGCCAAGCCACAGGATTTAATAAACTTGAGGAAAAAGTTTTAACTCTA  
RM8A     .....  
RM8B     .....  
RM8C     .....G.....  
RM8con     .....

Figure 1 continued

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Lc743 E E R T N K V M F P F G P T V E P Y Q T 320  
RM8con . . . . .  
901 +-----+-----+-----+-----+ 960  
Lc743 GAAGAGCGTACAAATAAGGTCATGTTTCCTTTTGGTCCCACTGTTGAGCCATATCAGACC  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 A D C V L P K H P R E M V K T A W G N S 340  
RM8con . . . . .  
961 +-----+-----+-----+-----+ 1020  
Lc743 GCTGATTGTGTCTTACCCAAACATCCTCGGGAATGGTTAAACTGCTTGGGGTAATTCC  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 I P T M M G N T S Y E G L F F T S I L K 360  
RM8con . . . . .  
1021 +-----+-----+-----+-----+ 1080  
Lc743 ATACCCACTATGATGGGTAACACTTCATATGAGGGTCTATTTTCACTTCAATTCTTAAG  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 Q M P M L V K E L E T C V N F V P S E L 380  
RM8con . . . . .  
1081 +-----+-----+-----+-----+ 1140  
Lc743 CAAATGCCTATGCTTGTTAAGGAATTGAAACTTGTGTCAATTTGTGCCAAGTGAATTG  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 A D A E R T A P E T L E M G A K I K K A 400  
RM8con . . . . .  
1141 +-----+-----+-----+-----+ 1200  
Lc743 GCTGATGCTGAACGCACCGCCCCAGAGACCTTGGAAATGGGTGCTAAAATTAAAAAGGCT  
RM8A .....T.....  
RM8B .....  
RM8C .....  
RM8con .....

Figure 1 continued

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Lc743 H V T G E T P T A D N F M D L C S H I Y 420  
RM8con . . . . .  
1201 -----+-----+-----+-----+-----+1260  
Lc743 CATGTTACAGGAGAAACACCAACAGCTGATAATTTTATGGATCTTTGCTCTCACATCTAT  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 F W F P M H R L L Q L R F N H T S G T P 440  
RM8con . . . . .  
1261 -----+-----+-----+-----+-----+1320  
Lc743 TTCTGGTTCCCCATGCATCGTTTGTGCAATTACGTTTCAATCACACCTCCGGTACACCC  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 V Y L Y R F D F D S E D L I N P Y R I M 460  
RM8con . . . . .  
1321 -----+-----+-----+-----+-----+1380  
Lc743 GTCTACTTGTATCGCTTCGACTTTGATTCCGAAGATCTTATTAATCCCTATCGTATTATG  
RM8A .....C.....C.....  
RM8B .....C.....C.....  
RM8C .....C.....C.....  
RM8con .....C.....C.....

Lc743 R S G R G V K G V S H A D E L T Y F F W 480  
RM8con . . . . .  
1381 -----+-----+-----+-----+-----+1440  
Lc743 CGTAGTGGACGTGGTGTTAAGGGTGTTAGTCATGCTGATGAATTAACCTATTTCTTCTGG  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Lc743 N Q L A K R M P K E S R E Y K T I E R M 500  
RM8con . . . . .  
1441 -----+-----+-----+-----+-----+1500  
Lc743 AATCAATTGGCCAAACGTATGCCTAAAGAATCGCGTGAATACAAAACAATTGAACGTATG  
RM8A .....  
RM8B .....  
RM8C .....  
RM8con .....

Figure 1 continued

SUBSTITUTE SHEET (RULE 26)

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Lc743 T G I W I Q F A T T G N P Y S N E I E G 520  
 RM8con . . . . .  
 1501 -----+-----+-----+-----+-----+1560  
 Lc743 ACTGGTATATGGATACAATTTGCCACCACTGGTAATCCTTATAGCAATGAAATTGAAGGT  
 RM8A .....  
 RM8B .....  
 RM8C .....  
 RM8con .....

Lc743 M E N V S W D P I K K S D E V Y K C L N 540  
 RM8con . . . . .  
 1561 -----+-----+-----+-----+-----+1620  
 Lc743 ATGGAAAATGTTTCCTGGGATCCAATTAAGAAATCCGACGAAGTATACAAGTGTGTTGAAT  
 RM8A .....T.....  
 RM8B .....T.....  
 RM8C .....T.....  
 RM8con .....T.....

Lc743 I S D E L K M I D V P E M D K I K Q W E 560  
 RM8con . . . . .  
 1621 -----+-----+-----+-----+-----+1680  
 Lc743 ATTAGTGACGAATTGAAAATGATTGATGTGCCTGAAATGGATAAGATTAAACAATGGGAA  
 RM8A .....T.....G  
 RM8B .....T.....G  
 RM8C .....T.....G  
 RM8con .....T.....G

Lc743 S M F E K H R D L F \* 570  
 RM8con . . . . .  
 1681 -----+-----+-----+-----+1713  
 Lc743 TCGATGTTTGAAAAACATAGAGATTATTTTAG  
 RM8A .....Lc743/3'.....  
 RM8B .....  
 RM8C .....  
 RM8con .....

Figure 1 continued

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**Figure 2.**

**SUBSTITUTE SHEET (RULE 26)**

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Figure 3.

ATGACTTTTCTGAAGCAATTCATATTTGCGCTGAAACTATGCTTTAAATGCATGGTCAAT  
1 -----+-----+-----+-----+-----+-----+ 60  
TACTGAAAAGACTTCGTTAAGTATAAAGCGGACTTTGATACGAAATTTACGTACCAGTTA  
M T F L K Q F I F R L K L C F K C M V N -  
AAATACACAAACTACCGTCTGAGTACAAATGAAACCCAAATAATCGATACTGAATATGGA  
61 -----+-----+-----+-----+-----+ 120  
TTTATGTGTTTGATGGCAGACTCATGTTTACTTTGGGTTTATTAGCTATGACTTATACCT  
K Y T N Y R L S T N E T Q I I D T E Y G -  
CAAATTAAGGGTGTTAAGCGAATGACCGTCTACGATGATTCTTACTACAGTTTCGAGAGT  
121 -----+-----+-----+-----+-----+ 180  
GTTTAATTCCCACAATTCGCTTACTGGCAGATGCTACTAAGAATGATGTCAAAGCTCTCA  
Q I K G V K R M T V Y D D S Y Y S F E S -  
ATACCCTATGCTAAGCCTCCAGTGGGTGAGTTGAGATTCAAGGCACCCAGCGGCCTGTA  
181 -----+-----+-----+-----+-----+ 240  
TATGGGATACGATTCCGAGGTCACCCACTCAACTCTAAGTTCCGTGGGGTCGCCGGACAT  
I P Y A K P P V G E L R F K A P Q R P V -  
CCATGGGAGGGTGACGTGATTGCTGTGGGCCAGCCAACAGATCGGTACAGACAGATTTTC  
241 -----+-----+-----+-----+-----+ 300  
GGTACCCTCCCACATGCACTAACGACACCCGGTCGGTTGTCTAGCCATGTCTGTCTAAAG  
P W E G V R D C C G P A N R S V Q T D F -  
ATAAGTGGCAAACCCACAGGTTCCGAGGATTGTCTATACCTGAATGTGTATACCAATGAC  
301 -----+-----+-----+-----+-----+ 360  
TATTCACCGTTTGGGTGTCCAAGCCTCCTAACAGATATGGACTTACACATATGGTTACTG  
I S G K P T G S E D C L Y L N V Y T N D -  
TTGAACCCAGACAAAAGGCGTCTGTTATGGTTTTTCATCCATGGCGGAGATTTTATTTTC  
361 -----+-----+-----+-----+-----+ 420  
AACTTGGGTCTGTTTTCCGCAGGACAATACCAAAAGTAGGTACCGCCTCTAAAATAAAAG  
L N P D K R R P V M V F I H G G D F I F -  
GGCGAAGCAAATCGTAACCTGGTTTGGTCCCGACTACTTTATGAAGAAACCCGTGGTCTTG  
421 -----+-----+-----+-----+-----+ 480  
CCGCTTCGTTTAGCATTGACCAAACCAGGGCTGATGAAATACTTCTTTGGGCACCAGAAC  
G E A N R N W F G P D Y F M K K P V V L -



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GTAACCGTGCAATATCGTTTGGGTGTGTTGGGTTTCCTTAGCCTGAAATCGGAAAATCTC  
481 -----+-----+-----+-----+-----+ 540  
CATTGGCACGTTATAGCAAACCCACACAACCCAAAGGAATCGGACTTTAGCCTTTTAGAG  
V T V Q Y R L G V L G F L S L K S E N L -  
AATGTCCCCGGCAACGCTGGCCTCAAGGATCAAGTAATGGCCTTGAGATGGGTCAAGAGT  
541 -----+-----+-----+-----+-----+ 600  
TTACAGGGGGCCGTTGCGACCGGAGTTCCTAGTTCATTACCGGAACCTCTACCCAGTTCTCA  
N V P G N A G L K D Q V M A L R W V K S -  
AATATTGCCATTTTTCGGTGGCGATGTAGACAATATTACCGTCTTCGGCGAAAGTGCTGGT  
601 -----+-----+-----+-----+-----+ 660  
TTATAACGGTAAAAGCCACCGCTACATCTGTTATAATGGCAGAAGCCGCTTTCACGACCA  
N I A I F G G D V D N I T V F G E S A G -  
GGGGCCTCAACCCATTACATGATGATAACCGAACAGACCCGTGGTTTATTCCATCGTGGT  
661 -----+-----+-----+-----+-----+ 720  
CCCCGGAGTTGGGTAATGTACTACTATTGGCTTGTCTGGGCACCAAATAAGGTAGCACCA  
G A S T H Y M M I T E Q T R G L F H R G -  
ATCATGATGTCCGTAATTCCATGTGCTCATGGGCCTCTACAGAATGCCAAAGTCGTGCG  
721 -----+-----+-----+-----+-----+ 780  
TAGTACTACAGGCCATTAAGGTACACGAGTACCCGGAGATGTCTTACGGTTTCAGCACGC  
I M M S G N S M C S W A S T E C Q S R A -  
CTCACCATGGCCAAACGTGTTGGCTATAAGGGAGAGGACAATGAAAAAGATATCCTGGAA  
781 -----+-----+-----+-----+-----+ 840  
GAGTGGTACCGGTTTGCACAACCGATATTCCCTCTCCTGTTACTTTTTCTATAGGACCTT  
L T M A K R V G Y K G E D N E K D I L E -  
TTCCTAATGAAAGCCAATCCCTATGATTTGATCAAAGAGGAGCCACAAGTTTTGACACCC  
841 -----+-----+-----+-----+-----+ 900  
AAGGATTACTTTTCGGTTAGGATACTAAACTAGTTTCTCCTCGGTGTTCAAAACTGTGGG  
F L M K A N P Y D L I K E E P Q V L T P -  
GAAAGAATGCAAATAAGGTCATGTTTCCTTTTGGACCCACTGTAGAACCATACCAGACA  
901 -----+-----+-----+-----+-----+ 960  
CTTTCTTACGTTTTATTCCAGTACAAAGGAAAACCTGGGTGACATCTTGGTATGGTCTGT  
E R M Q N K V M F P F G P T V E P Y Q T -  
GGCGACTGTGTGGTACCCAAACCAATCAGAGAAATGGTGAAGACCGCCTGGGGAAATTTCG  
961 -----+-----+-----+-----+-----+ 1020  
CGGCTGACACACCATGGGTTTGGTTAGTCTCTTTACCACTTCTCGGGACCCCTTTAAGC  
A D C V V P K P I R E M V K S A W G N S -

Figure 3 continued

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ATACCCACATTGATAGGCAATACCTCCTACGAAGGTTTGCTTTCCAAATCAATTGCCAAA  
1021 -----+-----+-----+-----+-----+-----+ 1080  
TATGGGTGTAACATATCCGTTATGGAGGATGCTTCCAAACGAAAGGTTTAGTTAACGGTTT

I P T L I G N T S Y E G L L S K S I A K -

CAATATCCGGAGGTTGTAAAAGAGTTGGAATCCTGTGTGAATTATGTGCCTTGGGAGTTG  
1081 -----+-----+-----+-----+-----+-----+ 1140  
GTTATAGGCCTCCAACATTTTCTCAACCTTAGGACACACTTAATACACGGAACCCCTCAAC

Q Y P E V V K E L E S C V N Y V P W E L -

GCTGACAGTGAACGCAGTGCCCCGAAACCCCTGGAGAGGGCTGCCATTGTGAAAAAGGCC  
1141 -----+-----+-----+-----+-----+-----+ 1200  
CGACTGTCACTTGCGTCACGGGGCCTTTGGGACCTCTCCCGACGGTAACACTTTTTCGGG

A D S E R S A P E T L E R A A I V K K A -

CATGTGGATGGGGAAACACCTACTCTGGATAATTTTATGGAGCTTTGCTCCTATTTCTAT  
1201 -----+-----+-----+-----+-----+-----+ 1260  
GTACACCTACCCCTTTGTGGATGAGACCTATTAATAACCTCGAAACGAGGATAAAGATA

H V D G E T P T L D N F M E L C S Y F Y -

TTCCTCTTCCCATGCATCGCTTCCTACAATTGCGCTTCAACCACACAGCTGGCACTCCC  
1261 -----+-----+-----+-----+-----+-----+ 1320  
AAGGAGAAGGGGTACGTAGCGAAGGATGTTAACGCGAAGTTGGTGTGTGACCGTGAGGG

F L F P M H R F L Q L R F N H T A G T P -

ATTTATTTGTATCGTTTCGATTTTCGATTCCGAAGAAATTATTAACCCCTATCGTATTATG  
1321 -----+-----+-----+-----+-----+-----+ 1380  
TAAATAAACATAGCAAAGCTAAAGCTAAGGCTTCTTTAATAATTGGGGATAGCATAATAC

I Y L Y R F D F D S E E I I N P Y R I M -

CGTTTTGGCCGTGGCGTTAAAGGTGTAAGCCATGCCGATGAGCTAACCTATCTCTTCTGG  
1381 -----+-----+-----+-----+-----+-----+ 1440  
GCAAAACCGGCACCGCAATTTCCACATTGCGTACGGCTACTCGATTGGATAGAGAAGACC

R F G R G V K G V S H A D E L T Y L F W -

AACATTTTGTGAAACGCCTGCCAAAGGAAAGCCGGAATACAAAACCATTTGAACGCATG  
1441 -----+-----+-----+-----+-----+-----+ 1500  
TTGTAAAACAGCTTTGCGGACGGTTTCCTTTTCGGCGCTTATGTTTTGGTAACTTGGGTAC

N I L S K R L P K E S R E Y K T I E R M -

GTTGGCATTTTGGACGGAATTCGCCACCACCGGCAAACCATACAGCAATGATATAGCCGGC  
1501 -----+-----+-----+-----+-----+-----+ 1560  
CAACCGTAAACCTGCCTTAAGCGGTGGTGGCGTTTGGTATGTCGTTACTATATCGGCCG

V G I W T E F A T T G K P Y S N D I A G -

Figure 3 continued

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ATGGAAAACCTCACCTGGGATCCCATAAAAAAATCCGATGATGTCTATAAATGTTTAAAT  
1561 -----+-----+-----+-----+-----+ 1620  
TACCTTTTGGAGTGGACCTAGGGTATTTTTTTTAGGCTACTACAGATATTACAAATTTA  
M E N L T W D P I K K S D D V Y K C L N -  
ATCGGCGATGAATTGAAAGTTATGGATTTGCCAGAAATGGATAAAATTAAACAATGGGCA  
1621 -----+-----+-----+-----+-----+ 1680  
TAGCCGCTACTTAACCTTTCAATACCTAACGGTCTTTACCTATTTTAATTTGTTACCCGT  
I G D E L K V M D L P E M D K I K Q W A -  
AGTATATTCGATAAAAAGAAGGAATTGTTT  
1681 -----+-----+-----+ 1710  
TCATATAAGCTATTTTTCTTCCTTAACAAA  
S I F D K K K E L F

Figure 3 continued

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Figure 4..

MdαE7 97 QTDFISGKPTGSEDCLYLNVTNDLNPDKRPVMVFIHGGGFIFGEANRN 146  
|.|||.||..|||:|:|:|.|||:|:|:|:|:|.||:|:|:  
LcαE7 97 QVDFITGKVCSEDCLYLSVYTNNLNPETKRPVLVYIHGGGFIIIGENHRD 146  
147 WYGPDYFMKKPVVLTVQYRLGVLGFLSLKSENLVNPGNAGLKDQVMALR 196  
|||:|:|.||:|.|||.|||.|||.|||.|||.|||.|||.|||  
147 MYGPDYFIKKDVVLINIYRLGALGFLSLNSEDLVNPGNAGLKDQVMALR 196  
197 WFKSNIAIFGGVDNITVFGESAGGASTHYMMITEQTRGLFHRGIMMSGN 246  
|:|.|.|||:|.|||:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|  
197 WIKNNCANFGGNPDNITVFGESAGAASTHYMMLTEQTRGLFHRGILMSGN 246  
↓  
247 SMCSSASTECQSRALTMARVGYKGEENEKDILEFLMKANPYDLIKEEPQ 296  
.:|.|.||:|:|:|.|||:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|  
247 AICPLANTQCQHRAFTLAKLAGYKGEDNDKDVLEFLMKAKPDLIKLEEK 296  
297 VLTPERM 303  
||| |.  
297 VLTLEER 303